# GOVERNMENT OF INDIA
# WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
# LOK SABHA

STARRED QUESTION NO:28
ANSWERED ON:25.02.2016
New Underground Water Resources
Chandel Kunwar Pushpendra Singh

**Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:**

(a) whether there is any scheme to assess and exploit new underground water resources in various parts of the country including drought prone areas;

(b) if so, the details thereof along with the new sources identified/found out in the country including Bundelkhand region during the last three years, State/UT-wise;

(c) the details of the various river linking projects proposed in the country; and

(d) whether the Government is working on the project of providing water in drought prone areas of the country including the over exploited areas of the said region by linking the dams of the said areas with the Ken-Betwa river-linking project and if so, the details thereof?

## Answer

THE HON'BLE MINISTER OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION (SUSHRI UMA BHARTI)

(a) to (d) A statement is laid on the Table of the House.

STATEMENT REFERRED IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. â€ *28 TO BE ANSWERED ON 25.02.2016 IN LOK SABHA REGARDING "NEW UNDERGROUND WATER RESOURCES" ASKED BY SHRI KUNWAR PUSHPENDRA SINGH CHANDEL, HON'BLE M.P, LOK SABHA:
(a) & (b) During XII Plan period Central Ground Water Board is implementing the Central Sector Scheme 'Ground Water Management & Regulation' in which aquifer mapping is a component. The aim of the Aquifer Mapping is to delineate aquifer disposition on a scale of 1:50000 in 3D and their characterization along with quantification for preparation of aquifer/ area specific ground water management plans. It is proposed to cover an area of 8.89 lakh sq.km. in the priority areas characterized by Over-Exploited, Critical and Semi-critical ground water assessment units, as well as water quality and other problematic/ vulnerable areas. The States covered in the priority area inter-alia include Rajasthan, Haryana, Punjab, Gujarat, Tamil Nadu, Karnataka, Andhra Pradesh and Telengana as well as the water scarce Bundelkhand Region of Uttar Pradesh and Madhya Pradesh. State wise details of cumulative progress of the last three years is given in Annexure -I

(c) Ministry of Water Resources, River Development & Ganga Rejuvenation has formulated a National Perspective Plan for water resources development envisaging inter-basin transfer of water in the Country. Under the National Perspective Plan (NPP), 14 links under Himalayan Rivers Component and 16 links under Peninsular Rivers Component have been identified based on field survey and investigation and detailed studies. The present status of links identified on rivers in various States of the Country is given at Annexure II.

(d) Ken − Betwa river linking project envisages irrigation to an area of about 7.00 lakh hectare annually in drought prone Bundelkhand region covering Chhattarpur, Tikamgarh, Panna and Shivpuri districts of Madhya Pradesh and Mahoba, Banda and Jhansi districts of Uttar Pradesh. Further Ken − Betwa Link Project will provide drinking water supply to about 13.5 lakh population in rural areas of the Chattarpur, Tikamgarh and Panna districts of Madhya Pradesh.
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Annexure-I
Annexure referred in reply to Part(b) of Lok Sabha Starred Question No.28 for 25.02.2016 regarding "New Underground Water Resources"
State wise cumulative progress under National Aquifer Mapping and Management Programme in the last three years

| Sl. No. | State | Area covered (in Km2) |
|---|---|---|
| 1 | Bihar | 2208 |
| 2 | Chhattisgarh | 1604 |
| 3 | Gujarat | 6600 |
| 4 | Haryana | * 24006 |
| 5 | Jammu & Kashmir | 2300 |
| 6 | Karnataka | 5938 |
| 7 | Kerala | 700 |

8 Madhya Pradesh ** 2179
9 Maharashtra 8492
10 Odisha 2977
11 Punjab 8499
12 Rajasthan 13808
13 Tamil Nadu 7130
14 Telangana 4547
15 West Bengal 2977
16 Uttar Pradesh*** 17893
17 NCT Delhi 1483
18 Area covered under pilot aquifer mapping in parts of five States (Rajasthan, Maharashtra, Karnataka, Tamil Nadu and Bihar) 3006
Total 116347

* Include National Capital Region − 13428 sq.km.; Other areas − 10578 sq.km.
** Include Bundelkhand Region − 895 sq.km; Other areas − 1284 sq.km.
*** Include Bundelkhand Region − 3500 sq.km.; National Capital Region − 10800 sq.km.; other areas − 3593 sq.km.

ANNEXURE-II
Annexure referred in reply to Part(c) of Lok Sabha Starred Question No.28 for 25.02.2016 regarding "New Underground Water Resources"
Present status of Inter Basin Water Transfer Links
Sl. No Name Rivers States concerned States benefited Status
Peninsular Component
1 Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link Mahanadi & Godavari Odisha, Maharashtra, Andhra Pradesh, Karnataka, & Chattisgarh, Andhra Pradesh & Odisha Feasibility Report Completed
2 Godavari (Inchampalli) - Krishna (Pulichintala) link Godavari & Krishna -do- -do- Feasibility Report Completed
3 Godavari (Inchampalli) - Krishna (Nagarjunasagar) link Godavari & Krishna Odisha, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka & Chattisgarh, -do- Feasibility Report Completed
4 Godavari (Polavaram) - Krishna (Vijayawada) link Godavari & Krishna Odisha, Maharashtra, Andhra Pradesh, Karnataka, & Chattisgarh, Andhra Pradesh Feasibility Report Completed
5 Krishna (Almatti) − Pennar link Krishna & Pennar -do- Andhra Pradesh & Karnataka Feasibility Report Completed
6 Krishna (Srisailam) − Pennar link Krishna & Pennar -do- -- Feasibility Report Completed
7 Krishna (Nagarjunasagar) - Pennar (Somasila ) link Krishna & Pennar Maharashtra, Andhra Pradesh & Karnataka, -do- Feasibility Report Completed
8 Pennar (Somasila) - Cauvery (Grand Anicut) link Pennar & Cauvery Andhra Pradesh, Karnataka, Tamil Nadu, Kerala & Puducherry Andhra Pradesh, Tamil Nadu & Puducherry Feasibility Report Completed

9 Cauvery (Kattalai) - Vaigai -Gundar link Cauvery, Vaigai & Gundar Karnataka, Tamil Nadu, Kerala & Puducherry Tamil Nadu Feasibility Report Completed
10 Ken-Betwa link
a) Ken-Betwa Link Phase-I

b) Ken-Betwa link Phase-II
Ken & Betwa Uttar Pradesh & Madhya Pradesh

- do- Uttar Pradesh & Madhya Pradesh

Madhya Pradesh DPR Phase-I completed in April 2010&

DPR Phase-II Completed in January 2014
11 Parbati -Kalisindh- Chambal link Parbati, Kalisindh & Chambal Madhya Pradesh, Rajasthan & Uttar Pradesh (UP requested to be consulted during consensus building ) Madhya Pradesh & Rajasthan Feasibility Report Completed
12 Par-Tapi-Narmada link Par, Tapi & Narmada Maharashtra & Gujarat Gujarat DPR Completed in August 2015.
13 Damanganga - Pinjal link
(As per DPR ) Damanganga & Pinjal Maharashtra & Gujarat Maharashtra (only water supply to Mumbai) DPR Completed in March 2014.
14 Bedti - Varda link Bedti & Varda Maharashtra, Andhra Pradesh & Karnataka Karnataka Pre-Feasibility Report Completed
15 Netravati − Hemavati link Netravati & Hemavati Karnataka, Tamil Nadu & Kerala Karnataka Pre-Feasibility Report Completed
16 Pamba - Achankovil - Vaippar link Pamba, Achankovil & Vaippar Kerala & Tamil Nadu, Tamil Nadu Feasibility Report Completed
Himalayan Component
1. Manas-Sankosh-Tista-Ganga (M-S-T-G) link Manas-Sankosh-Tista-Ganga Assam, West Bengal, Bihar& Bhutan Assam, West Bengal & Bihar FR in progress
2. Kosi-Ghaghra link Kosi & Ghaghra Bihar , Uttar Pradesh & Nepal Bihar & Uttar Pradesh FR in Indian portion in progress
3. Gandak-Ganga link Gandak & Ganga -do- Uttar Pradesh Draft FR completed(for Indian portion)
4. Ghaghra-Yamuna link Ghaghra & Yamuna -do- Uttar Pradesh FR completed (for Indian portion)
5. Sarda-Yamuna link Sarda & Yamuna Bihar, Uttar Pradesh, Haryana, Rajasthan, Uttarakhand & Nepal Uttar Pradesh & Uttarakhand

FR completed (for Indian portion)
6. Yamuna-Rajasthan link Yamuna & Sukri Uttar Pradesh, Gujarat, Haryana & Rajasthan Haryana & Rajasthan Draft FR completed
7. Rajasthan-Sabarmati link Sabarmati -do- Rajasthan & Gujarat Draft FR completed

8. Chunar-Sone Barrage link Ganga & Sone Bihar & Uttar Pradesh Bihar & Uttar Pradesh Draft FR completed
9. Sone Dam − Southern Tributaries of Ganga link Sone & Badua Bihar & Jharkhand Bihar & Jharkhand FR in progress
10. Ganga(Farakka)-Damodar-Subernarekha link Ganga, Damodar & Subernarekha West Bengal, Odisha & Jharkhand West Bengal, Odisha & Jharkhand Draft FR completed
11. Subernarekha-Mahanadi link Subernarekha & Mahanadi West Bengal & Odisha West Bengal & Odisha Draft FR Completed
12.
Kosi-Mechi link Kosi &Mechi Bihar , West Bengal & Nepal Bihar PFR completed. FR to be taken up Entirely lies in Nepal
13. Farakka-Sunderbans link Ganga & Ichhamati West Bengal West Bengal Draft FR completed
14. Jogighopa-Tista-Farakka link (Alternative to M-S-T-G) Manas, Tista & Ganga -do- Assam, West Bengal & Bihar Alternative to M-S-T-G Link. Not to be taken up.

FR -- Feasibility Report
PFR − Pre feasibility Report
DPR − Detailed Project Report
S&I -- Survey and Investigation
MCM -- Million Cubic Meters

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